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Federal Communications Commission
Washington, D.C. 20554

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In the Matter of)
)
International Settlement Rates) IB Docket No. 96-261

REPORT AND ORDER

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By the Commission: Chairman Hundt and Commissioner Ness issuing separate statements.

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I. Introduction

1. In this *Order*, we establish benchmarks that will govern the international settlement rates that U.S. carriers may pay foreign carriers to terminate international traffic originating in the United States. The action we take in this *Order*, along with our recent *Accounting Rate Flexibility Order*¹ and our proceedings implementing the World Trade Organization ("WTO") Basic Telecom Agreement, substantially completes our plan to restructure the economics of the market for U.S. international telecommunications services. This restructuring will promote the low cost, technologically innovative interconnectivity serving all the world's consumers that should be the hallmark of a Global Information Infrastructure.

2. The benchmark settlement rates we adopt in this *Order* are necessary because, under the current international accounting rate system, the settlement rates U.S. carriers pay foreign carriers to terminate U.S.-originated traffic are in most cases substantially above the costs foreign carriers incur to terminate that traffic.² The significant margins on international

¹ Regulation of International Accounting Rates, Phase II, *Fourth Report and Order*, 11 FCC Rcd 20063 (1996) ("*Accounting Rate Flexibility Order*").

² The current international accounting rate system was developed as part of a regulatory tradition in which international telecommunications services were supplied through a bilateral correspondent relationship between national monopoly carriers. An accounting rate is the price a U.S. facilities-based carrier

termination fees that now prevail cause U.S. consumers to pay artificially high prices for international services and discourage foreign carriers from introducing effective competition and cost-based pricing for all telecommunications services.³ Moreover, the above-cost margins in settlement rates can be used to finance strategies that create competitive distortions in the market for U.S. international services.

3. The potential for competitive distortions in the U.S. market for international services is a pressing concern as we move forward with implementing the commitments the United States made in the WTO Basic Telecom Agreement reached on February 15, 1997. The Commission has proposed new rules to implement these commitments.⁴ These commitments, and our proposed rules, will make it much easier for foreign carriers to enter and invest in all U.S. markets for basic telecommunications services. The benchmarks policy we adopt here reduces the possibility that this more open entry could create competitive distortions in the U.S. market. This approach is fully consistent with our philosophy of using regulatory measures to control the pricing of interconnection by carriers with control over bottleneck facilities.

4. The combination of freer entry into the U.S. market, the market opening commitments of other countries in the WTO Basic Telecom Agreement, and the introduction of our benchmark settlement rates should provide incentives conducive to the introduction of alternative arrangements to the traditional accounting rate system for the termination of international traffic. The Commission has already adopted an *Accounting Rate Flexibility*

negotiates with a foreign carrier for handling one minute of international telephone service. Each carrier's portion of the accounting rate is referred to as the settlement rate. In almost all cases, the settlement rate is equal to one-half of the negotiated accounting rate. U.S. carriers are required to file a copy of their settlement agreements with the Commission. See 47 C.F.R. § 43.51(a)(2).

³ See Letter from Tom Bliley, Chairman, John Dingell, Ranking Democratic Member, W.J. "Billy" Tauzin, Chairman, Subcommittee on Telecommunications, Trade and Consumer Protection, Michael G. Oxley, Chairman, Subcommittee on Finance and Hazardous Materials, Committee of Commerce, U.S. House of Representatives, to Reed E. Hundt, Chairman, Federal Communications Commission, dated January 29, 1997 (stating that accounting rate reform "will benefit consumers in the U.S. and around the globe").

⁴ See Rules and Policies on Foreign Participation in the U.S. Telecommunications Market, IB Docket 97-142, *Order and Notice of Proposed Rulemaking*, FCC 97-195 at ¶ 32 (rel. June 4, 1997) ("*Foreign Participation Notice*"). See also Amendment of the Commission's Regulatory Policies to Allow Non-U.S.-Licensed Space Stations to Provide Domestic and International Satellite Service in the United States, IB Docket 96-111, *Further Notice of Proposed Rulemaking*, FCC 97-252 (rel. July 18, 1997) ("*DISCO II Notice*").

Order that sets forth the conditions under which U.S. carriers⁵ may deviate from the requirements of the Commission's International Settlements Policy ("ISP"). The rules we adopted in the *Accounting Rate Flexibility Order* should allow carriers to create alternative arrangements for pricing and organizing the supply of international services.

5. This *Order* addresses the urgent need for reform of the traditional settlements system on the many routes where more flexible cost-oriented alternative arrangements are not yet contemplated. We conclude that we must reduce the settlement rates paid by carriers in the United States in order to fulfill our duty to ensure reasonable rates for U.S. consumers. We also conclude we would promote competition in the United States market by using settlement rate benchmarks to remedy anticompetitive conditions in the international marketplace. We emphasize, however, that we would prefer to achieve our goals through a multilateral agreement on accounting rate reform. If, in the future, there is multilateral consensus on a substantially equivalent international measure to achieve our goals of a more cost-based and non-discriminatory system of settlements in a timely manner, we will waive enforcement of the benchmark settlement rates. This was precisely our approach when we adopted the effective competitive opportunities ("ECO") test to guide conditions for allowing increased foreign investment.⁶ When the WTO agreement provided substantially comparable conditions, the Commission proposed to abandon the ECO test for WTO Member countries.⁷

6. Our action in this *Order* comes after years of efforts by the U.S. Government to achieve cost-based termination fees internationally by means of discussion and negotiation bilaterally and multilaterally at the International Telecommunication Union ("ITU"), the Organization for Economic Cooperation and Development ("OECD"), and other international organizations. We will continue to work in the ITU and other international organizations to achieve such a multilateral agreement. This *Order* does not take effect until January 1, 1998 -- the same day as the WTO Basic Telecom Agreement. The first target period for U.S. carriers to negotiate rates at or below the settlement rate benchmarks, however, is not until January 1, 1999. We encourage other countries that have expressed interest in an international agreement on reforming the accounting rate system to continue to work with the United States toward achieving that goal.

⁵ References in this *Order* to "U.S. carriers" include any carrier licensed to operate in the United States regardless of its ownership or principal place of business.

⁶ See Market Entry and Regulation of Foreign-Affiliated Entities, *Report and Order*, 11 FCC Rcd 3873 (1995), *recon. pending* ("Foreign Carrier Entry Order").

⁷ See *Foreign Participation Notice* at ¶ 32.

7. We believe that accounting rate reform is necessary and will benefit consumers and carriers in all countries, including businesses and others who rely on global telecommunications services. Thus, contrary to the views of some commenters, it is not the case that accounting rate reform will benefit consumers in the United States at the expense of carriers in overseas markets. Accounting rate reform will allow consumers in all countries to receive higher quality service, more service options,⁸ and lower rates as accounting rates are reduced to a more cost-based level.⁹ Accounting rate reform will also benefit every carrier that provides international services by stimulating growth of those services. The current accounting rate system suppresses global demand by contributing to inflated International Message Telephone Service ("IMTS") calling prices. As settlement rates, and in turn calling prices, are reduced, demand for international services will be stimulated.¹⁰

8. It is clear to us that accounting rate reform is essential if carriers that currently benefit from and rely on artificially high settlement rates are to remain viable. As the Secretary-General of the ITU stated recently, the global telecommunications market has undergone changes that will be "little short of revolutionary" for the future of the international accounting rate system.¹¹ In this new market environment, carriers who wish to rely on high settlement rates will likely find that market forces will create incentives for bypass of their high-cost routes.

⁸ As the Coalition for Hemispheric Competitiveness notes, the current system of inflated settlement rates has created incentives for monopoly IMTS providers to restrict or prohibit the provision of other services, such as Internet or VSAT, which could potentially undermine their settlement payments. Coalition for Hemispheric Competitiveness Comments at 4; *see also* ICA Reply at 3 (if monopoly carriers' excess profits from settlements are reduced, those carriers will lose much of their incentive to stifle competition).

⁹ *See, e.g.*, Alexis de Tocqueville Institution Reply at 3 (lower rates will bring benefits to individuals and businesses throughout Latin America); Coalition for Hemispheric Competitiveness Comments at 3 (artificially high settlement rates create increased costs for Latin America and Caribbean users calling from their countries to one another and to the United States).

¹⁰ *See* Alexis de Tocqueville Institution Comments at 3 (many of the concerns expressed by commenters "are based on a static analysis of telecom markets, and fail to take into account the changes that lower rates and greater competition will bring"); Frontier Comments at 1 ("The existence of above-cost accounting rates has artificially depressed demand for international services.")

¹¹ Dr. Pekka Tarjanne, Secretary-General, ITU, "The 1998 Telecommunications Revolution," Study Group 3 Meeting, May 27, 1997 ("Tarjanne May 27 speech"). The full title of Study Group 3 is the Study Group on "Tariff and Accounting Principles including Related Telecommunications Economic and Policy Issues."

9. The WTO Basic Telecom Agreement reached on February 15, 1997 will have profound effects on the accounting rate system.¹² Pursuant to that agreement, 69 countries, covering 95 percent of the global market for basic telecommunications services, have agreed to permit competition from foreign suppliers of basic telecommunications services. In addition, 59 of these countries have committed to enforce fair rules of competition for basic telecommunications services by subscribing to the detailed, procompetitive rules contained in the Reference Paper on Regulatory Principles negotiated as part of the WTO Basic Telecom Agreement. As a result, most of the world's major trading nations have made binding commitments to transition rapidly from monopoly provision of basic telecommunications services to open entry and procompetitive regulation of these services.

10. The WTO Basic Telecom Agreement will fundamentally change the nature of relations between international telecommunications carriers. In many markets, the accounting rate system will become largely irrelevant as alternative means for routing traffic become the norm. The traditional bilateral correspondent relationships between national monopoly carriers are breaking down as countries open their markets to competition. For example, in markets that permit competition in international services, carriers will be able to provide end-to-end service without the use of accounting rates. In addition, under the WTO Basic Telecom Agreement, more countries will allow switched traffic to flow over private lines, outside the settlements system. At a minimum, the increased competition in the global IMTS market that will result from this trade agreement will exert downward pressure on accounting rates in competitive markets as new entrants compete to terminate foreign traffic.

11. As a result of these competitive pressures, an increasing amount of international traffic will migrate from the traditional accounting rate system to least cost routes through the use of practices such as hubbing, refile, and reorigination.¹³ These practices are all examples of routing bilateral traffic through a third country to take advantage of a lower accounting rate between the third country and the destination country. As we observed in the *Notice*, such least-cost routing practices already have begun to erode the stability of the accounting rate system. Least-cost traffic routing is an economically rational response to inflated settlement rates, and will continue as long as carriers maintain excessive

¹² In the words of Secretary-General Tarjanne, the agreement on basic telecommunications "changes everything." Tarjanne May 27 speech at 2.

¹³ See "Report Of The Informal Expert Group On International Telecommunications Settlements," International Telecommunication Union, April 1997 ("*Informal Expert Group Report*") (the implementation of the WTO Basic Telecom Agreement "may, unless there is adequate price reform, result in an increasing proportion of the world's international traffic flowing outside the traditional international settlements system").

settlement rates.¹⁴ Carriers are also developing technological means other than these least-cost routing practices to bypass the accounting rate system. For example, internet telephony has the potential to be a significant alternative to the accounting rate system. Calls made over the internet are not subject to the accounting rate system, and as a result, we anticipate that charges for internet telephony will be substantially closer to the actual cost of providing service, and much lower than most collection rates for international service.¹⁵

12. Above-cost settlement rates pose particular problems for the United States as the largest and most competitive market in the world for facilities-based and resale domestic and international long distance services. Because rates in the United States are lower than in many countries, a substantial amount of world traffic is routed through the United States. The traditional settlement rate system assumes that a customer's physical location determines the place of origin of an international call, with the carrier in the originating country paying a settlement rate to the carrier in the terminating country. However, service innovations such as callback allow customers to change the originating country for settlement purposes. The result is that many more calls are originated for settlement purposes from countries like the United States with vigorous retail and wholesale markets than in monopoly markets that lack similar competition. These traffic routing patterns will only be exacerbated as countries implement their market access commitments under the WTO Basic Telecom Agreement.

13. Partly as a result of these traffic routing patterns, the U.S. settlement deficit continues to grow steeply. In 1996, the U.S. settlement deficit totalled \$5.4 billion, double what it was in 1990. Conservative estimates put at least seventy percent of that total as an above-cost subsidy from U.S. consumers to foreign carriers. It is this subsidy paid by U.S. consumers which is the focus of our concern, not the total settlements deficit. Our goal is to move to a nondiscriminatory and more cost-based rate structure for the termination of global telecommunications services so that market-generated shifts in the traffic balance do not continue to exacerbate the level of the U.S. net settlements deficit. We do not believe it benefits consumers to arbitrarily restrict a carrier's ability to route traffic in the most economically efficient manner or to restrict the development of new technologies and new routing methods.

14. For all these reasons, we find that the global telecommunications market is changing in ways that cannot accommodate the traditional international accounting rate

¹⁴ See, e.g., Dr. Pekka Tarjanne, Consultation Document on Accounting Rate Reform, Temporary Document 3-E, ITU-T Study Group 3, Geneva, November 11-15, 1996 ("The ability of regulators to control accounting rate bypass is limited except insofar as the incentive would disappear if accounting rates and collection charges were more symmetric and closer to costs").

¹⁵ See "The Model is Extensible," Telemedia News & Views, Thursday, May 1, 1997.

system. We therefore remain committed to achieving accounting rate reform, despite the opposition in the record from many foreign carriers and some governments. We recognize, moreover, that the liberalizing market trends that are undermining the accounting rate system will also make our settlement rate benchmarks moot for competitive countries and carriers. We have already seen that in markets where there is robust competition, settlement rates are usually substantially lower than in monopoly markets.¹⁶ We anticipate that with the increasing market liberalization that will result from implementation of countries' commitments in the WTO Basic Telecom Agreement, settlement rates between the United States and many countries will rapidly fall below our settlement rate benchmarks. Nonetheless, the benchmarks are necessary because many countries still will not be open to competition, and in those that have introduced competition, efficient pricing structures take time to develop.

15. As the Commission observed in the *Notice*, there has been substantial agreement in multilateral organizations for several years on the need to reform the accounting rate system. For example, both the OECD and the ITU have been studying accounting rate reform, with the emphasis in both organizations on the principles of transparency, nondiscrimination, and cost-based pricing.¹⁷ The Inter-American Telecommunications Commission ("CITEL") recently formed an ad hoc working group to study the issue of accounting rate reform¹⁸ and many other regional organizations have also committed resources and time to study this issue.¹⁹

16. Many countries have also demonstrated a commitment to achieving accounting rate reform. For example, the United Kingdom and New Zealand recently joined the United States in improving the transparency of the accounting rate system by publishing their accounting rates. It is expected that the European Union countries will eliminate entirely accounting rates for intra-European calls after January 1, 1998, and rely instead on a system of call termination charges based on domestic interconnection rates. The commitment of many countries to accounting rate reform is reflected in the comments filed in this

¹⁶ For example, U.S. carriers pay a settlement rate of \$0.08 to Sweden; \$0.105/peak and \$0.07/off-peak to the United Kingdom, and \$0.12-\$0.08 to Canada. These settlement rates are substantially below the settlement rate benchmarks we adopt in this *Order*.

¹⁷ See, e.g., "International Telecommunications Pricing Practices and Principles: A Progress Review," OECD, Paris (1995).

¹⁸ See, "Consensus Issues On Accounting Rates: Second Colloquium and First CITEL Ad Hoc Working Group Meeting On Accounting Rates," May 13-15, 1997.

¹⁹ For example, accounting rate reform was the topic of a workshop at the AFCOM '97 Conference held in Swaziland, May 19-23, 1997.

proceeding. Most commenters acknowledge the need for accounting rate reform, even if they disagree with our approach.²⁰

17. A significant multilateral achievement in the realm of accounting rate reform is ITU-T Recommendation D.140, which was adopted by the ITU Telecommunications Standardization Sector Study Group 3 in 1992. ITU-T Recommendation D.140 calls for carriers to adopt nondiscriminatory, cost-oriented, and transparent accounting rates within five years. Adoption of ITU-T Recommendation D.140 was an important step forward in accounting rate reform in terms of a multilateral commitment to a set of guiding principles. However, progress on the actual implementation of those principles has been slow, at best. We are committed to the principle of cost-oriented settlement rates adopted in Recommendation D.140 and to achieving implementation of that principle as expeditiously as possible. Our settlement rate benchmarks are consistent with the directive in ITU-T Recommendation D.140 to achieve cost-oriented rates and represent substantial progress in implementing that directive in the United States.²¹ As NTIA states, our benchmarks policy "represent[s] a constructive means of implementing the primary goals of ITU-T Recommendation D.140 -- moving accounting rates closer to cost in an expeditious manner, consistent with transparency and non-discrimination."²²

18. Many commenters urge the Commission to work through multilateral organizations, especially the ITU, to achieve accounting rate reform.²³ We have contributed

²⁰ See, e.g., European Union Comments at 1 ("The European Community and its Member States [] agree with the end purpose of the NPRM regarding international settlement rates"); United Kingdom Comments at 1 ("The UK will wish to support the US in discussion of benchmarking or other methods of creating greater momentum for rapid cost-orientation of accounting rates as agreed in ITU Recommendation D.140"); Telecom. Authority of Singapore Comments at 1 ("Singapore is in general agreement with the motivation behind the Notice which is to achieve nondiscriminatory 'cost-based' accounting rates"); Japan Comments at 1 (Japan "shares the view" of the United States "that international settlement rates should be reduced and cost-based").

²¹ As we discuss below in Section II.B.1, the methodology for calculating settlement rate benchmarks we adopt in this *Order* relies on the framework for determining cost-oriented rates set forth in Recommendation D.140.

²² NTIA Reply at 8.

²³ See, e.g., Telefónica del Perú Comments at 13 ("supports -- and urges the FCC to participate in -- multilateral negotiations regarding the accounting rate issue"); HKTI Comments at 29 (urging the Commission to work through the ITU); Deutsche Telecom Comments at 9 ("the highest priority should be a global reform of the accounting rate system") Cable and Wireless Comments at 2 (urging the Commission "to work with the international community to achieve multilateral, managed change"); CANTO Comments at 2 ("ITU-T Study Group 3 is the appropriate multilateral forum for the United

actively to the work of multilateral organizations and agree that we should continue to work vigorously with these organizations to pursue accounting rate reform.²⁴ We do not, however, agree that our contribution to multilateral efforts should be our exclusive means of addressing accounting rate reform. As explained below, we believe we must take action in order to fulfill our statutory mandate to ensure U.S. consumers receive telecommunications services at reasonable rates and to address the potential for competitive distortions in the U.S. market for international services as we move forward with implementation of the commitments made by the United States in the WTO Basic Telecom Agreement. Thus, while we remain committed to pursuing accounting rate reform in multilateral organizations, we must also take action domestically in the interim to reduce settlement rates to a more cost-based level. The action we take here will be concurrent with our continued efforts to achieve reform of the accounting rate system in the ITU and other multilateral organizations.

19. The benchmark rates we adopt in this *Order* are based on foreign carriers' publicly available tariff rates and information published by the ITU. We categorize countries primarily by their level of economic development, as defined by a World Bank and ITU classification scheme. For each category, the benchmark is based on an average of the tariff rates and other data for each country in the category. The three benchmarks we adopt are: \$0.15 per minute for upper income countries; \$0.19 per minute for upper middle income and lower middle income countries; and \$0.23 per minute for lower income countries. Even

States or other countries to pursue global reform of the accounting rate system"); Dept. of Communications of Ministry of Transport of the Republic of Latvia Comments at 1 (supports the work of the ITU); Grenada Comments at 1 (settlement rates are agreed bilaterally under the auspices of the ITU); France Telecom Comments at 7-9; Pakistan Telecom Authority Comments at 1, 2; Suriname Comments at 1; Telefónica de España Comments at 36-37; COMTELCA Reply at 8-10; ITJ Comments at 2, 6-11 (urging the Commission to work through the ITU and expressing concern that the benchmarks policy could be counter-productive); Lattelekom Comments at 4; Indonesia Reply at 2; Brazil Reply at 1-2 (suggests costing principles a multilateral forum could use to establish cost-based settlement rates); Portugal Comments at 1-2 (the ITU is the proper forum to discuss accounting rate reform); St. Vincent and the Grenadines Comments at 1 (considers proposals in the *Notice* to be trade matter that should be dealt with in the WTO); Singapore Comments at 2 (urging the Commission to work through the ITU); Singapore Telecom Comments at 2-3; Solomon Islands Comments at 1; KDD Comments at 22-23 (reform should be pursued through the ITU); CAT Comments at 3 (it would be appropriate to form a special group within the ITU to review the accounting rate system); VSNL Comments at 13; Sonatel Reply at 1; Telekom Malaysia Reply at 2.

²⁴ For example, a United States delegation participated in the recent ITU-T Study Group 3 meetings held in Geneva May 22-30, 1997, and submitted two written contributions on the issue of accounting rate reform for consideration by that group. FCC representatives gave presentations on accounting rate reform at the OECD Working Group on Telecommunications and Information Services Policies held in Paris on April 10-11, 1997, the AFCOM '97 Conference held in Swaziland on May 19-23, 1997, and the CITEL Colloquium on the International Settlement Regime held in Margarita Island, Venezuela on March 11-13, 1997.

though these benchmark settlement rates will continue to exceed, usually substantially, any reasonable estimate of the level of foreign carriers' relevant costs of providing international termination service, they will nonetheless substantially reduce the excess in current settlement rates in a manner that treats foreign carriers fairly.

20. We will require that U.S. carriers negotiate with their foreign correspondents settlement rates at or below the appropriate benchmark according to a schedule of target reductions. If U.S. carriers fail to achieve progress in negotiating settlement rates at or below the benchmarks, we will take appropriate enforcement measures to ensure that progress is made and that, ultimately, U.S. carriers achieve rates that comply with the benchmarks.

21. While we are committed to achieving more cost-based settlement rates, we also recognize that an immediate reduction of settlement rates to the benchmark levels could result in undue disruption of foreign carriers' operations and their correspondent relations with U.S. carriers. Disruption of either U.S. carriers' or foreign carriers' networks would not be in the public interest. The policies we adopt here thus take into account the need to ensure a smooth transition from current settlement rates to our benchmarks.

22. To provide an opportunity for all carriers to make appropriate adjustments to enable them to move to more cost-based settlement rates, we adopt five transition periods for U.S. carriers to negotiate settlement rates at or below the benchmarks. The transition periods are based on the same categories used to calculate settlement rate benchmarks, with an additional category for countries with teledensity, or lines per one hundred inhabitants, less than one. We will require that U.S. carriers negotiate settlement rates with foreign carriers according to the following transition schedule: within one year of the effective date of this *Order* with carriers in upper income countries; within two years with carriers in upper middle income countries; within three years with carriers in lower middle income countries; within four years with carriers in low income countries; and within five years with carriers in countries with teledensity less than one.

23. We also adopt conditions for certain types of Section 214 authorizations²⁵ to address potential distortions in the U.S. market for IMTS created by above-cost settlement rates. We adopt two conditions. First, we will condition any carrier's authorization to provide international facilities-based switched service from the United States to an affiliated market on the carrier's foreign affiliate offering U.S. international carriers a settlement rate at or below the relevant benchmark. If, after the carrier has commenced service to the affiliated market, we learn that the carrier's service offering has distorted market performance, we will

²⁵ Section 214 of the Communications Act of 1934, 47 U.S.C. § 214, requires carriers to obtain authorization from the Commission to construct, acquire or operate, or engage in transmission over any lines.

take enforcement action. That enforcement action may include a requirement that the foreign affiliate's settlement rate on the affiliated route be reduced to a level at or below a "best practice rate," or a revocation of the carrier's authorization. Second, we will grant carriers' applications for authority to provide switched services over facilities-based or resold international private lines on the condition that at least half of the traffic on the route in question is subject to a settlement rate at or below the relevant benchmark. If we learn that competition on the route has been distorted, we will take enforcement action. That enforcement action may include a requirement that at least half of the traffic on the route be subject to a settlement rate at or below the "best practice rate." It could also include revocation of carriers' authorizations.

24. The settlement rate benchmarks we adopt here are consistent with our authority under the Communications Act of 1934 to declare rates and practices to be unjust and unreasonable and to prescribe rates and practices that are just and reasonable. Our settlement rate benchmarks will ensure that a large cost component affecting the end user charges for an international call, the settlement rate, moves closer to the underlying cost of international termination service. By placing a limit on the amount that U.S. carriers can pay for this component, our benchmarks comport with our past ratemaking practices under Sections 201 through 205 of the Communications Act of 1934, as amended ("the Act"). For example, under traditional rate-of-return regulation we prescribed rate components (*i.e.*, allowable rate base items and expenses) or calculation methodologies (*i.e.*, cost of capital, depreciation, cash working capital studies) for U.S. carriers to use in setting their interstate and international rates.²⁶ More recently, we have moved away from a rate-of-return regulatory regime to a regime that relies on a price cap methodology for dominant carriers provisioning interstate and international services.²⁷ Even in this new regime, however, we have found it necessary at times to focus regulatory oversight on components that are reflected in the rates charged to end users. We have done this, for example, with regard to the charges that interexchange carriers must pay for access to the exchange access facilities of incumbent local exchange carriers ("LECs") for origination or termination of interstate and international traffic. Because incumbent LECs have little or no competition in the provision of these services, we have

²⁶ See, e.g., *Communications Satellite Corp.: Investigation into Charges, Practices, Classifications, Rates and Regulations*, 70 FCC 2d 1449 (rel. Feb. 2, 1979).

²⁷ See *Motion of AT&T Corp. to be Declared Non-Dominant for International Service*, Order, FCC 96-209 (rel. May 14, 1996) ("AT&T International Non-dominance Order"), *recon. pending*; *Motion of AT&T to be Reclassified as a Non-Dominant Carrier*, 11 FCC Rcd 3271 (1995) ("AT&T Domestic Non-dominance Order"), *recon. pending*; *Revisions to Price Cap Rules for AT&T Corp.*, 10 FCC Rcd 3009 (1995); *Competition in the Interstate Interexchange Marketplace*, Report and Order, 6 FCC Rcd 5880 (1991), *recon.*, 6 FCC Rcd 7569 (1991), *further recon.*, 7 FCC Rcd 2677 (1992).

taken, and continue to take, action to ensure that the incumbent LEC access rates move toward the underlying cost of providing access services.²⁸

25. Similarly, we seek through adoption of benchmark settlement rates to bring a component that affects end user international rates closer to the underlying cost of providing international termination services. As with the access charges paid by interexchange carriers, U.S. international carriers, for the most part, do not have a competitive international market from which to purchase international termination services. We therefore must take action to ensure that the settlement rate component of an end user rate does not prevent U.S. consumers from having access to telecommunications services at reasonable rates.

26. Commenters raised several issues related to our authority under the Communications Act and ITU regulations to establish settlement rate benchmarks. We respond to these commenters' arguments in detail below in Section II.E. In that section, we demonstrate that the Communications Act provides us with the authority to reform U.S. carrier participation in international settlement rate practices in the manner we adopt in this *Order*. Section 201 of the Act requires that "all charges, practices, classifications, and regulations for and in connection with ['foreign communication' services] be just and reasonable."²⁹ International telecommunications services that are settled under a settlement rate agreed to by a U.S. international carrier and its foreign correspondent fall within the definition of "foreign communication" in the Act and settlement rates are a "charge" or "practice." We thus find that the plain language of Section 201 gives us jurisdiction over settlement rates. To the extent that the above-cost portion of settlement rates paid by U.S. carriers to their foreign correspondents leads to those settlement rates being "unjust or unreasonable," Section 201 requires us to declare such "charges" or "practices" unlawful. We analyze in detail why the benchmark settlement rates we adopt in this *Order* represent the highest amount at which we consider a settlement rate to be presumptively just and reasonable under Section 205 of the Act.

27. We also find that our settlement rate benchmarks are consistent with ITU regulations and general international law principles of comity and national sovereignty. The rules adopted here do not constitute the exercise of jurisdiction over foreign carriers. Instead, we establish in this *Order* the rate at which a settlement rate agreed to by a U.S. international carrier satisfies that carrier's obligation to comply with the "just and reasonable" requirements of Sections 201 and 205. We do not adopt any rules in this *Order* that provide for enforcement action against a foreign carrier for its failure to agree to a settlement rate at or

²⁸ Access Charge Reform, CC Docket No. 96-262, et al., *First Report and Order*, FCC No. 97-158 (rel. May 16, 1997) ("*Access Charge Reform Order*").

²⁹ 47 U.S.C. § 201.

below the relevant benchmark. Obviously, by placing a cap on the level of the rate U.S. carriers may negotiate with their foreign correspondents, our actions will have an indirect effect on foreign carriers. International services, by their very nature, require one end of the communications to be handled outside of the United States, and thus rules regarding the U.S. end of the communication may have an impact on the foreign end as well. An indirect effect on foreign carriers, however, does not militate against the validity of rules that only operate directly on carriers within the United States.

28. We discuss our settlement rate benchmarks and the methodology for calculating them in Section II.A. In Section II.B., we describe the mechanisms we adopt to assist U.S. and foreign carriers in the transition to more cost-based settlement rates and measures we will take to enforce our benchmarks. We discuss the Section 214 authorization conditions we adopt to address the potential market distortions created by above-cost settlement rates in Section II.C. We describe in detail our legal basis for establishing settlement rate benchmarks in Section II.E.

II. Discussion

29. In our *Notice*, we presented proposals for revising our benchmark settlement rates to move them closer to the level of costs incurred by foreign carriers to terminate international traffic.³⁰ The *Notice* solicited comment on four issues: (1) how should settlement rate benchmarks be calculated; (2) how long should the transition to benchmark rates last; (3) what enforcement mechanisms are necessary to ensure carriers make progress in negotiating settlement rates within the benchmarks; and (4) can the benchmark rates be used to address competitive problems in the U.S. IMTS market?³¹

30. Initial comments on our *Notice* were filed on February 7, 1997, and reply comments were filed March 31, 1997.³² The Commission received over 120 initial and reply comments, including 90 from foreign carriers and governments. The insights and concerns raised by the commenters have been very valuable to us as we have developed our benchmarks policy. We have taken the concerns raised in the record into account in

³⁰ *International Settlement Rates*, IB Docket No. 96-261, *Notice of Proposed Rulemaking*, FCC No. 96-484 (rel. December 19, 1996) ("*Notice*").

³¹ *Notice* at ¶ 4.

³² The Commission granted an extension of the reply comment date from March 10, 1997, to March 31, 1997. See *International Settlement Rates*, IB Docket No. 96-261, *Order Granting Extension of Time*, DA 97-440 (rel. Feb. 27, 1997).

developing our policy and have modified several of our proposals in the *Notice* in response to them.

31. We believe we must take action to reduce settlement rates toward cost to fulfill our statutory mandate to ensure U.S. consumers receive telecommunications services at reasonable rates. Our mandate under the Communications Act is to make available a rapid, efficient worldwide wire and radio communications service with adequate facilities and reasonable charges.³³ The measures we adopt in this *Order* are intended to ensure that IMTS rates paid by U.S. consumers are reasonable. Moreover, they are intended to reduce the potential for competitive distortions in the U.S. market for IMTS that above-cost settlement rates can produce. These distortions could impede the development of competition in the U.S. market, to the detriment of consumers and service providers.

32. Above-cost settlement rates have a direct and substantial impact on the prices U.S. consumers pay for IMTS. U.S. consumers pay on average 88 cents per minute for international calls and they pay on average 13.5 cents per minute for domestic long distance calls. Yet, the difference in cost of the underlying facilities between the two services is minimal. Indeed, as we stated in the *Notice*, the costs of providing telephony have been decreasing and are becoming virtually distance insensitive due to recent technological advances.³⁴ Above-cost settlement rates paid by U.S. carriers to their foreign correspondents are a significant factor in the difference in calling prices between international and domestic long distance services. As the Coalition for Hemispheric Competitiveness states, monopoly carriers charging inflated settlement rates "in effect impose their monopoly pricing on customers located in open markets" such as the United States.³⁵ Therefore, to ensure that the rates paid by U.S. consumers are reasonable, we must reduce the settlement rates paid by U.S. carriers to a more cost-based level.³⁶

³³ See 47 U.S.C. § 151.

³⁴ *Notice* at ¶ 9. See Tarjanne May 27 speech at 6 (since 1988, "significant cost elements, such as the cost of undersea cable or satellite capacity, have been falling by some 30 percent per year"). See also AT&T Comments at 9 (noting that the original capital costs of the TAT-12 and TAT-13 undersea cables brought into service in 1995 and 1996 are one third the capital cost of the TAT-11 cable brought into service in 1993).

³⁵ Coalition for Hemispheric Competitiveness Comments at 4-5; see also ICA Reply at 1-3 (noting the high rates its members pay for international telecommunications services and urging the Commission to take action to reduce settlement rates so that calling prices will decrease).

³⁶ Several commenters question whether U.S. consumers will see the benefits of settlement rate reductions. We address this issue in Section II.D., *infra*.

33. We recognize that while above-cost settlement rates contribute significantly to the high rates paid by U.S. consumers for IMTS, they are not, as some commenters point out, the sole factor.³⁷ Another important factor is insufficient competition in some sectors of the U.S. market for IMTS. Thus, we must also focus our efforts on encouraging increased competition in the U.S. market if we want to ensure that consumers pay reasonable prices. Our benchmark settlement rates are an important part of that effort because they address the potential market distortions that are created by above-cost settlement rates.

34. There are two such market distortions that could adversely affect competition in the U.S. market for IMTS. One is the potential for one-way bypass. This could occur if a foreign carrier collecting above-cost settlement rates is able to send its switched traffic over resold private lines into the United States, but U.S. carriers are unable to send their traffic over private lines in the reverse direction, and must continue to pay a relatively high settlement rate. The other potential market distortion could arise when a foreign carrier enters the U.S. market to provide facilities-based service to its home market. Any settlement payments made by the U.S. affiliate to its foreign parent for service to the U.S. affiliate's home market would simply be an internal corporate transfer. Because the foreign carrier's U.S. affiliate would not have to pay the above-cost settlement rates that its competitors must pay to the foreign carrier, the U.S. affiliate would be able to price its services in the U.S. market below the level of costs incurred by its competitors. However, if a foreign carrier is paying settlement rates that are closer to cost-based levels than current rates, its incentive and ability to engage in this market distorting behavior are significantly diminished.

35. Some commenters have questioned the need for settlement rate benchmarks and, in many cases, our motive for establishing benchmarks. The problem the Commission is trying to address through its settlement rate benchmarks, as these commenters see it, is the fact that U.S. net settlements payments have been increasing in recent years. These commenters argue that alternative routing services such as callback, country direct services and refile, which the Commission has encouraged, contribute significantly to the U.S. net settlements payments. Therefore, they contend, if the Commission wishes to reduce the U.S.

³⁷ See, e.g., European Union Reply at 3 (part of the explanation for high collection rates "would appear to be the lack of effective competition between the U.S. international carriers"); Telefónica del Perú Comments at 9-10 (lack of full competition in the U.S.-outbound international telecommunications market is the primary cause of high collection rates); PBCOM Comments at 3-5; 9-10 (high collection rates in relation to settlements payments evidence a need for increased competition in the U.S. market for IMTS and the Commission should grant promptly authority to new competitors to begin providing international service); GTE Comments at 7-8 (noting extent to which AT&T collection rates exceed net settlement rates); HKTI Comments at 10-12 (despite decrease in HKTI accounting rates, U.S. collection rates have increased on the U.S.-Hong Kong route); KDD Comments at 9-10 (despite decreases in KDD accounting rates, U.S. collection rates on the U.S.-Japan route have increased); COMTELCA Reply at 5-6.

net settlements payment, it should discourage alternative routing services.³⁸ Many commenters also note that demographic factors such as differences in income levels and substantial immigrant populations in the United States contribute to the traffic imbalance between the United States and foreign countries. Based on this observation, they conclude that the Commission is mistaken in its attempts to address the level of U.S. net settlements payments through settlement rate benchmarks.³⁹

36. These commenters are correct in pointing to a number of the causes of the settlements deficit; these arguments, however, fundamentally misconstrue the problem which the Commission seeks to remedy through its settlement rate benchmarks. The rapidly escalating U.S. net settlements deficit is a serious problem, but it is a harmful byproduct of the more basic issue: the fact that the current accounting rate system creates economic inefficiencies in the global market for telecommunications services. We are not, as many commenters contend, concerned with the absolute level of U.S. net settlements payments *per se* or the contribution of settlement payments to the U.S. trade deficit. Rather, we are concerned with the extent to which those payments reflect rates that substantially exceed the

³⁸ See, e.g., Nepal Comments at 2; AHCIET Comments at 6; Cable and Wireless Comments at 22-24; CANTO Comments at 5; HKTI Comments at 5-6; 13-14; KDD comments at 8-9; Telefónica de España Comments at 37-40; VSNL Comments at 4-5; TSTT Comments at 6; Telecom Vanuatu Comments at 2; Solomon Islands Comments at 2; China Telecom Comments at 2; COMTELCA Comments at 10; COMTELCA Reply at 2-6; Deutsche Telecom Comments at 2-3; IDC Comments at 14-16; Korea RPOAs Comments at 4; Lattelekom Comments at 3-4; India Comments at 1; Korea Telecom Reply at 1; New T&T Comments at 1; Taiwan Comments at 2; Telecom Italia Comments at 5-6; Telefónica del Perú Comments at 10; Telekom Malaysia Comments at 3; Telstra Comments at 7-8; CAT Comments at 2; Sri Lanka Telecom Comments at 3-5; Portugal Comments at 3; Singapore Telecom Comments at 3-5; Panama Reply at 10-12; Sonatel Reply at 2. Some commenters also urge us to take into account the revenues of U.S. telecommunications equipment suppliers in considering the level of the U.S. trade balance deficit for telecommunications. See, e.g., ASETA Comments at 3; TSTT Comments at 5; see also Cable and Wireless Comments at 2 (settlements deficit is only "one facet of the complex equation which produces the U.S. balance of trade in communications").

³⁹ See, e.g., Telmex Comments at 15 (large traffic flows to Mexico are due to "a confluence of factors," including the relative levels of economic development and teledensity of the United States and Mexico, and the large number of U.S. citizens and residents of Mexican ancestry); GTE Comments at 5-6 (part of the imbalance is caused by factors such as "United States demographics" and "the calling habits of U.S. consumers," which are beyond the control of the Commission); Pakistan Telecom Comments at 2 (traffic imbalance due to differences in income level and expatriate communities in the United States); see also FT Comments at 6-7; Korea RPOAs Comments at 4-5; Cable and Wireless Comments at 21-22; VSNL Comments at 5; Telekom Malaysia Reply at 2.

underlying costs of providing international termination services.⁴⁰ As discussed throughout the *Notice*, these above-cost settlement rates contribute to the inflated rates paid by U.S. consumers for international services, create the potential for competitive distortions in the U.S. market for IMTS, and produce inefficiencies in the global telecommunications market.

37. We are not persuaded by those opposing our proposals that our settlement rate benchmarks are not necessary to move settlement rates closer to a cost-based level. Our tentative conclusion in the *Notice* that most current settlement rates substantially exceed costs has not been refuted in the record. The majority of commenters acknowledge this fact and agree that reform of the accounting rate system is necessary.⁴¹ The lowest enduring settlement rate between the United States and a competitive overseas destination is currently \$0.08 per minute.⁴² Yet, the average settlement rate U.S. carriers pay their foreign

⁴⁰ We reiterate the support we announced in our *Accounting Rate Policy Statement* for new services that encourage alternatives to the traditional accounting rate system and increase competitive pressures in the global telecommunications market. *Policy Statement on International Accounting Rate Reform*, 11 FCC Rcd 3146 at ¶¶ 21-23 (1996) ("*Accounting Rate Policy Statement*"). These alternative services are not, as many commenters argue, the source of the "problem" in the global market for international services. Rather, they are an economically rational response to the problem of inflated settlement rates and distorted tariffs. See, e.g., ICA Reply at 5 (callback services "are a natural response of the marketplace to global pricing distortions"). As long as settlement rates remain above cost, carriers in competitive markets will find methods to circumvent those rates to provide new services at competitive rates to their customers.

⁴¹ See, e.g., European Union Reply at 1 ("It is clear that settlement rates worldwide are far higher than can be warranted by the full economic cost of an international telecommunications service"); Japan Comments at 1-2 ("It is of course desirable that settlement rates should be more cost-based and be further reduced"); ITJ Comments at 2; Indonesia Reply at 1 (supports efforts to adopt cost-based settlement rates); IDC Reply at 1 ("we generally agree that reform of the current system is desirable"); ASETA Comments at 2 ("We do agree that accounting rates must be cost-oriented"); Portugal Comments at 1 ("agrees that the present accounting rate system should be reformed"); COMTELCA Comments at 1; Deutsche Telecom Comments at 3-5; France Telecom Comments at 3; Brazil Reply at 1 (supports "the FCC position of accounting rate reduction"); Singapore Comments at 1 ("is in general agreement with the motivation behind the *Notice* which is to achieve nondiscriminatory 'cost-based' accounting rates"); Singapore Telecom Comments at 1; New T&T Comments at 1 ("considers that the achievement of settlement rates which more closely resemble the costs of providing international termination services is a noteworthy and essential goal"); HKTI Comments at 1 (the accounting rate system "is increasingly out of step with modern service configurations and multi-carrier markets"); KDD Comments at 1 ("supports establishing cost-oriented settlement rates and moving toward a new system of remuneration"); Telefónica del Perú Comments at 1 ("There is an international consensus -- which Telefónica del Perú shares -- that accounting rates should continue to move toward cost"). Only a few commenters contend that current rates are cost-based. For example, CARICOM states that the rates charged by its member countries "are in fact very closely related to cost." CARICOM Reply at 1.

⁴² This is the current settlement rate between the United States and Sweden. See Section II.B.3., *infra*.

correspondents is approximately \$0.35,⁴³ which is more than four times this lowest prevailing settlement rate. Moreover, settlement rates with many countries are several times higher than the average rate of \$0.35.⁴⁴

38. Some commenters contend that we need not take action to reform the accounting rate system and reduce settlement rates to more cost-based levels because settlement rates have been declining recently without government intervention. They also argue that competitive market forces, accelerated by the WTO Basic Telecom Agreement, will ensure that this downward trend continues.⁴⁵ Some commenters also argue that our decision in the *Access Charge Reform Order* to rely upon market forces to generate cost-based access rates in the United States conflicts with our proposal to establish settlement rate benchmarks.⁴⁶

39. It is true that changing market conditions have increased pressure on the accounting rate system and helped to reduce settlement rates. However, settlement rates are still substantially above-cost. Moreover, the costs of providing international services have continued to decrease.⁴⁷ In addition, effective competitive market conditions exist in only a

⁴³ This average settlement rate is a weighted average based on the total minutes of U.S.-outgoing traffic.

⁴⁴ For example, U.S. carriers' settlement rate with Colombia is \$0.59 per minute; with India, \$0.79 per minute; with the Syrian Arab Republic, \$1.00 per minute; with Thailand \$0.75 per minute; and with Trinidad and Tobago, \$0.575 per minute. Accounting Rates for International Message Telephone Service of the United States, Federal Communications Commission, International Bureau, Telecommunications Division, June 1, 1997.

⁴⁵ See, e.g., PTI Comments at 3-5; GTE Reply at 3-5; KDD Reply at 2-4; Telefónica de España Comments at 32-35; Singapore Telecom Reply at 4; see also Telecom Italia Comments at 3,4; 6-7 (arguing that market based solutions have worked and the Commission should not seek to impose a regulatory solution); Telefónica de España Reply at 7-10 (urging the Commission to focus on increasing competition consistent with the WTO Basic Telecom Agreement rather than adopting benchmarks). See also Australia Reply at 1 (stating that it prefers "a market-driven, rather than administrative, approach to this issue").

⁴⁶ Letter from Alfred M. Mamlet and Colleen A. Sechrest, counsel to Telefónica de España and Telefónica Larga Distancia de Puerto Rico, to William Caton, Acting Secretary, July 30, 1997 (Telefónica de España and Telefónica Larga Distancia de Puerto Rico July 30 *Ex Parte*); Letter from Robert J. Aamoth, counsel for KDD, to William Caton, June 5 1997 (KDD June 5 *Ex Parte*).

⁴⁷ See, e.g., AT&T Comments at 9 (noting reductions in costs of undersea cables brought into service in 1995 and 1996 versus the costs of the TAT-11 cable brought into service in 1993).

few countries. Monopoly conditions prevail in most.⁴⁸ Our experience suggests that in those countries introducing competition in the near future, it will often take time for vigorous competition to create efficient pricing. Under these circumstances, we do not believe we can rely entirely on the market to reduce settlement rates on a timely basis to a more cost-based level.⁴⁹ We thus believe benchmark rates are necessary to ensure that U.S. carriers achieve settlement rate reductions on a timely basis that will benefit U.S. consumers.

A. Benchmarks

40. We would prefer to let competitive market forces determine settlement rates, as that would provide the best assurance that carriers are charging cost-based rates.⁵⁰ But as stated above, competitive market conditions do not exist in many countries at this time. As we stated in the *Notice*, we believe settlement rates in markets where there is effective competition would tend to the level of long run incremental costs plus a reasonable contribution to joint and common costs.⁵¹ More specifically, for international termination services, prices would tend to the level of total service long run incremental cost, or TSLRIC, plus a reasonable contribution to joint and common costs.⁵² As explained in the *Notice*, the

⁴⁸ See *infra* Section II.C.1 (distinguishing U.S. interexchange access market from IMTS market). See also *Informal Expert Group Report* at 4 (despite rapid movement toward competitive markets, "there will continue to be a number of relationships between competitive and non-competitive markets"). See also ICA Comments at 4 ("The fact of the matter is . . . most countries continue to sanction monopolies").

⁴⁹ See NTIA Reply at 5 ("[i]n a competitive market, settlement rates would naturally move closer to incremental cost, but we cannot rely solely on market forces to achieve timely reform of accounting rates in markets where limited or no competition exists").

⁵⁰ See, e.g., *Access Charge Reform Order* at ¶ 263 ("Competitive markets are superior mechanisms for protecting consumers by ensuring that goods and services are provided to consumers in the most efficient manner possible and at prices that reflect the cost of production"). See also Alexis de Tocqueville Institution Comments at 5 ("As more nations create competitive telecommunications markets, the need for governments to involve themselves in the setting of [settlement] rates will diminish and disappear").

⁵¹ Notice at ¶ 41.

⁵² References to incremental cost and long run incremental cost throughout this *Order* are to TSLRIC. In the *Interconnection Order* the Commission adopted a version of the TSLRIC costing methodology called total element long run incremental cost as the basis for pricing interconnection and unbundled elements. See Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 and Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers, *First Report and Order*, 11 FCC Rcd 15499 (1996) ("*Interconnection Order*"), *Order on Reconsideration*, 11 FCC Rcd 13042 (1996), *petition for review pending and partial stay granted, sub nom. Iowa Utilities Bd. v. FCC*, 109 F.3d 418 (8th Cir. 1996), *pricing rules vacated*, 1997 WL 403401

TSLRIC of providing international termination services is the additional cost that a firm incurs as a result of providing that service. This cost includes a risk-adjusted return on capital.⁵³ The term "total service," in the context of TSLRIC, indicates that the cost measured is that of providing an entire service, in this case, international termination service.⁵⁴ The term "long run," in the context of TSLRIC, refers to a period long enough so that all of a firm's costs become variable or avoidable.⁵⁵

41. Most economists generally agree that competitive markets, over the long run, tend to force prices toward incremental costs.⁵⁶ In dynamic, competitive markets, firms take action based not on embedded costs, but on the relationship between market-determined prices and forward-looking costs. If market prices exceed forward-looking economic costs, new competitors will enter the market.⁵⁷ As new competitors enter the market, prices will be driven toward a forward-looking incremental cost level. For services such as international termination services that share some joint and common costs,⁵⁸ incremental costs would include a reasonable contribution to forward-looking joint and common costs. Otherwise, prices based on incremental costs might not permit recovery of forward-looking costs if there were significant joint and common costs among services.

42. Because settlement rates in effectively competitive markets would tend to the level of TSLRIC plus a reasonable contribution to joint and common costs, our settlement rate

(8th Cir. July 18, 1997).

⁵³ *Interconnection Order* at ¶700.

⁵⁴ *Id.* at ¶ 677.

⁵⁵ *Id.*

⁵⁶ See generally Alfred E. Kahn, *The Economics of Regulation: Principles and Institutions* 69 (1988). See also Stephen Breyer, *Regulation and Its Reform* 52 (1982); Harold Hotelling, "The General Welfare in Relation to Problems of Taxation and of Railway and Utility Rates," 6 *Econometrica* 242 (1938).

⁵⁷ *Interconnection Order* at ¶ 620.

⁵⁸ We use the term "joint costs" to refer to costs incurred when two or more outputs are produced in fixed proportion to the same production process (i.e., when one product is produced, a second product is generated by the same production process at no additional cost). We use the term "common costs" to refer to costs that are incurred in connection with the production of multiple products or services and remain unchanged as the relative proportion of those products or services varies (e.g., the salaries of corporate managers). See *Interconnection Order* at ¶ 676.

benchmarks ideally should be set at that level.⁵⁹ However, as we observed in the *Notice*, the data necessary to calculate foreign carriers' incremental costs are not available at this time and no commenter has provided cost data in the record about the costs of providing international termination services.⁶⁰

43. Because data on foreign carriers' costs are not available at this time, we must look to another source of data to establish benchmarks. In this *Report and Order*, we adopt the methodology for establishing benchmarks that we proposed in the *Notice*. The methodology is based on foreign carriers' publicly available tariffed rates and data published by the ITU-T. We describe this methodology, which we refer to as the "tariffed components price" or "TCP" methodology, in more detail in the next section. We categorize countries by their level of economic development, and establish a separate benchmark rate for each category using the TCP methodology. For each category, the benchmark is based on an average of the tariff rates and other data for each country in the category.

44. Even though our goal is cost-based settlement rates, the benchmarks based on the TCP methodology that we adopt here result in settlement rates that we believe still exceed foreign carriers' costs to terminate international traffic because they are based primarily on foreign carriers' tariffed rates. Such tariffed rates include costs which would not be included in cost-based settlement rates, such as costs associated with marketing, allowances for uncollectible billings and other retail communications services to consumers. Nonetheless, the benchmarks are substantially below most prevailing settlement rates and represent progress toward achieving cost-based rates, and we find that they are reasonable given the limited data available to us for calculating benchmarks at this time. While we adopt the TCP methodology as the basis for calculating our settlement rate benchmarks, we are still committed ultimately to achieving settlement rates that reflect incremental costs and believe that rates will reflect incremental costs as IMTS markets become increasingly competitive.

1. Tariffed Components Price Methodology

a. The Notice

⁵⁹ A regional tariff group within the framework of ITU-T Study Group 3, the Regional Group for Asia and Oceania ("TAS") Group, has concluded that settlement rates should be at an incremental cost level. A report to Study Group 3 on the TAS Group's activity noted that "the time is rapidly approaching when a long run incremental costing model would be more appropriate" than a fully distributed costing model. Temporary Document 4-PL at 2, ITU-T Study Group 3, Geneva, May 22-30, 1997.

⁶⁰ The Commission requested comment in the *Notice* on alternative methodologies for calculating benchmarks other than the approach proposed in the *Notice* and on steps it might take to obtain incremental cost data. *Notice* at ¶ 56.

45. The TCP methodology proposed by the Commission in the *Notice* relies on the framework described in ITU-T Recommendation D.140.⁶¹ That Recommendation contains cost guidelines that identify the three specific network elements that are used to provide IMTS and the cost components for those elements to be included in cost-oriented settlement rates. The specific network elements are: (1) international transmission facilities; (2) international switching facilities; and (3) national extension (domestic transport and termination).

46. The Commission released with the *Notice* a study by the International Bureau which calculates prices for these three elements.⁶² The prices calculated for the international transmission and national extension network components is based on foreign carriers' tariff rates, and the price for the international gateway element is based on data published by the ITU. The TCP methodology proposed in the *Notice* uses the sum for each country of these tariffed prices for the international transmission and national network components and the price for the international gateway switching component, which we referred to collectively as a country's "tariffed components price," to calculate settlement rate benchmarks.

47. We noted that the logic of basing benchmarks on a foreign carrier's tariffed prices is that those prices are the same tariff rates charged by a foreign carrier to its domestic customers. Nondiscriminatory treatment of U.S. carriers would require that foreign carriers charge U.S. carriers a rate for terminating service from the United States that is comparable to the rate they assess their own domestic customers. We also noted that tariff rates are publicly available, so benchmarks based on such rates can be revised, if necessary, as the tariff rates change.

48. We stated that benchmark settlement rates based on tariffed components prices will permit foreign carriers to recover more than their incremental cost of terminating international service. This is because the tariff rates used in the calculations presumably reflect foreign carriers' incremental cost plus a significant contribution to common costs. In fact, because the tariff rates used to calculate TCPs include costs associated with providing retail communications service to consumers which would not be included in cost-based settlement rates, settlement rates based on retail rates will substantially exceed incremental cost. For example, tariff rates include an allowance for uncollectible billings, general

⁶¹ ITU-T Recommendation D.140, "Accounting Rate Principles for International Telephone Services," Geneva (1992).

⁶² "Foreign IMTS Interconnection Costs," A Report Prepared by the International Bureau, Telecommunications Division, Federal Communications Commission, December 1996 ("Bureau Report"). Sixty-five countries were included in the Bureau's study, generally those having the largest traffic volumes with the United States. The Bureau used data collected during the fourth quarter of 1995 through mid-1996 to calculate tariffed components prices for these sixty-five countries.

overhead expenses associated with retail service, and marketing and commercial expenses that would not be included in the cost of providing international termination services.

49. The following is a summary of the methodology for calculating the tariffed price for each network element proposed by the Commission in the *Notice* and detailed in the Bureau Report:

- International facility component

The international facility component consists of international transmission facilities, both cable and satellite, including the link to international switching facilities. This component includes only the half-circuit on the terminating end because originating carriers have traditionally been responsible for the half circuit on the originating end of a call. The Commission proposed to base the price of this component on foreign carriers' private line rates for dedicated circuits because the circuits used for private line service are functionally the same as those used to provide IMTS. Under the Commission's proposed methodology, the private line rates are converted to a per minute charge. This is done by first calculating the number of voice grade circuits derived from a private line half-circuit and then calculating a per minute rate for these voice grade circuits using an estimate of monthly minutes transmitted over international circuits.

- International gateway component

The international gateway component consists of international switching centers and associated transmission and signalling equipment. Foreign carriers generally do not offer a separate tariff rate for the international gateway component. The Commission therefore proposed to calculate the price for this component using information published by the ITU-T in Recommendation D.300R.⁶³ Recommendation D.300R calculates for TEUREM member countries⁶⁴ accounting rate shares for each of the three network elements in

⁶³ ITU-T Recommendation D.300R "Determination of Accounting Rate Shares in Telephone Relations between Countries in Europe and the Mediterranean Basin," Geneva (1992) ("ITU-T Recommendation D.300R").

⁶⁴ The TEUREM group is a regional tariff group created under the auspices of ITU-T Study Group 3. Its members are: Albania, Algeria, Andorra, Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Egypt, Finland, France, Gibraltar, Germany, Greece, Greenland, Hungary, Ireland, Israel, Italy, Lebanon, Libya, Liechtenstein, Luxembourg, Malta, Monaco, Morocco, Netherlands, Norway, Poland, Romania, San Marino, Spain, Sweden, Switzerland, Syria, Tunisia, Turkey, United Kingdom, Russia, Vatican City

ITU-T Recommendation D.140. The rates that are calculated vary according to what percentage of plant capacity is digital; the rates decline as the level of digitalization rises, reflecting the greater efficiency of digital equipment. The Commission proposed to categorize countries by the three levels of digitalization used in Recommendation D.300R and to calculate a price for the international gateway component based on the accounting rate shares calculated in ITU-T Recommendation D.300R.⁶⁵

- National extension component

The national extension component consists of national exchanges, national transmission, and the local loop facilities used to distribute international service within a country. The Commission proposed to use foreign carriers' domestic rates and the distribution of U.S. billed service within a country to compute an average charge per minute for cost of this component.⁶⁶

50. We concluded that a carriers' TCP could provide a sound basis for calculating settlement rate benchmarks in the absence of carrier-specific cost information. We therefore presented and sought comment on several options for calculating benchmarks using the TCPs.

b. Positions of the Parties

51. The majority of commenters recognize the dilemma posed by the Commission that, on the one hand, settlement agreements should contain settlement rates that are cost-based, but on the other, the data necessary to calculate costs for each foreign carrier are not

State, and Yugoslavia.

⁶⁵ The digitalization categories used in Recommendation D.300R are: (1) 0-30%, (2) 31-60%, and (3) 61-100%. ITU-T Recommendation D.300R calculates an accounting rate share for the international exchange component of 0.0324 SDR (about \$.048) for the first category, 0.0228 SDR (about \$.034) for the second category, and 0.129 SDR (about \$.019) for the third category. The accounting rate share figures are calculated from data filed by the member countries. The Bureau Report notes that telephone administrations providing service in developing countries are generally more likely to have communications networks that are less technologically advanced and, therefore, have lower levels of digital equipment than those in developed countries. Based on this observation, the Commission proposed to use the highest accounting rate share figure for the international exchange component in Recommendation D.300R for the least developed countries in the study, the lowest figure for the most developed countries, and the middle figure for other countries in the study.

⁶⁶ In certain small markets, e.g., Hong Kong and Kuwait, consumers are charged a monthly subscription rate that includes domestic service.